

6(4); 7(7)

PHASE I BOOK EXPLOITATION

SOV/3552

Volzhin, Aleksey Nikolayevich, and Viktor Andreyevich Yanovich

Protivoradiolokatsiya (Radar Countermeasures) Moscow, Voen. izd-vo M-va obor.
SSSR, 1960. 134 p. (Series: Radiolokatsionnaya tekhnika) No. of copies printed
not given.

Ed.: Yu. S. Denisov; Tech. Ed.: A. N. Mednikova.

PURPOSE: The booklet is intended for officers engaged in operating radio facilities.
It may also be used by the general reader.

COVERAGE: The authors briefly outline the principles of reconnaissance against
radar operations and describe the equipment used for this purpose. Special
attention is given to jamming and counter-jamming measures. The booklet is
based chiefly on material from non-Soviet sources. No personalities are mention-
ed. There are 27 references: 16 Soviet (9 of which are translations) and 11
English. A list of booklets in the same series already published and to be pub-
lished in the near future is given on the inside back cover.

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Radar Countermeasures

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Analysis of received signals

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Passive interference

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AVAILABLE: Library of Congress

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5-3-60

Card 3/3

VOLZHIN, G.N.

Some potentials for raising labor productivity in industrial construction. Prom. stroi. 39 no.5:8-10 '61. (MIRA 14:7)

1. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR.
(Building—Technological innovations)

VOLZHIN, N.H.; GUSEV, M.I.

Effectiveness of cooperative utilization of equipment in
railroad and industrial transportation. Zhel.dor.transp.
41 no.7:81-85 J1 '59. (MIRA 12:12)

1. Nachal'nik gruzovoy sluzhby Donatskoy dorogi, Stalino (for
Volzhin). 2. Nachal'nik tekhnicheskogo otдела Donatskoy
dorogi, Stalino (for Gusev).
(Railroad—Freight cars)

VOLZHIN, S.N.; MINAYEV, V.I.; POPOV, G.R.; SPUL'MEYSTER, L.F.

Ring-type switch in a relay with noncontact control. Priborostro-
enie no.1:11-14 Ja '64. (MIRA 17:2)

VOLZHINA, N. S. (Moskva)

Sequelae of the exclusion of Galen's vena cerebri magna in young animals. Arkh. pat. no.4:55-61 '62. (MIRA 15:4)

1. Iz laboratorii po izucheniya razvitiya mozga (rukovoditel' - deystvitel'nyy chlen AMN SSSR prof. B. N. Klovskiy) Instituta pediatrii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. O. D. Sokolova-Ponomareva)

(BRAIN—BLOOD SUPPLY)

VOLZHINA, N.S.

Changes in the higher nervous activity in dogs after the excision
of all vascular plexuses of the brain. Zhur. vys. nerv. deiat.
11 no.1:142-150 Ja-F '61. (MIRA 14:5)

1. Laboratory for Studying Brain Development, Institute of Pediatrics,
U.S.S.R. Academy of Medical Science, Moscow.
(CONDITIONED RESPONSE) (BRAIN—BLOOD SUPPLY)

USSR / Human and Animal Morphology, Normal and Pathological.
Pathological Anatomy.

S

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 36041

Author : Kiseleva, Z. N. Volzhina, N. S.

Inst : Not given

Title : Experimentally Induced Hydrocephalus in Young Animals.

Orig Pub : Arkhiv patologii, 1957, 19, No. 7, 44-52.

Abstract : Cotton plugs, injected into the cerebral aqueducts of 24 puppies, aged 2 weeks to 1½ months, obstructed the drawing off of "liquor" from the laterals and the third ventricles. In 24-36 hours after the operation, an acute edema of the brain developed. From the 3rd to the 8th day, the edema decreased, and hyperemia of the medulla developed. On the 12-30th day, the vessels and capillaries became dilated due to prolonged asphyxia. In the puppies that survived 9-30

Card 1/2

SHUKHAT, A.P.; VOLZHINA, N.S. (Moskva)

Roentgenological observations on the motor function of the
gastrointestinal tract in puppies following the excision of
subcortical formations (corpora caudata). Pat. fiziol. i
eksp. terap. 6 no.6:67-68 N-D'62 (MIRA 17:3)

1. Iz rentgenovskogo kabineta revmatologicheskogo otdeleniya
(zav. - deystvitel'nyy chlen AMN SSSR prof. O.D. Sokolova-
Ponomareva) i iz otdeleniya po izucheniyu razvitiya mozga
(zav. - deystvitel'nyy chlen AMN SSSR prof. B.N. Klosovskiy)
Instituta pediatrii AMN SSSR.

KLOSOVSKIY, B.N.; VOLZHINA, N.S.

Surgical method for complete bilateral one-stage removal of the optic thalamus in dogs. *Fiziol.zhur.* 46 no.1:117-120 Ja '60.

(MIRA 13:5)

1. From the laboratory of brain development of the pediatric institute of the Academy of Medical Sciences of the U.S.S.R., Moscow.

(THALAMUS surg.)

KLOSOVSKIY, B.N., prof.: VOLZHINA, N.S.; VASIL'YEV, G.A. (Moskva)

Physiology of the optic thalamus. Vop.neirokhir. 23 no.6:1-6
H-D '59. (MIRA 13:4)

1. Laboratoriya po izucheniyu razvitiya mozga Instituta pediatrii
AMN SSSR i laboratoriya patofiziologii vysshey nervnoy deyatel'-
nosti Instituta nevrologii AMN SSSR. 2. Chlen-korrespondent AMN
SSSR (for Klosovskiy).
(THALAMUS physiol.)

U.S.S.R. Human and Animal Physiology. Nervous System. T

Abs Jour: Ref Zhur-Biol., No 5, 1958, 22617.

Author : Klossovsky, B. N., Volzhina, N. S.
Inst : Not given.
Title : Removal of the Gaudate Bodies.

Orig Pub: Fiziol. zh. SSSR, 1956, 42, No 9, 817-819.

Abstract: During prolonged experiments (2-3 yrs.) with bilateral removal of the caudate bodies (with preservation of the cerebral cortex), no confirmation was obtained of the existing opinion on the influence of the caudate bodies on blood pressure, respiration, vestibular function, growth and trophic development. The alimentary, play, sexual, maternal and other instincts were preserved (in puppies) but behavior was disturbed for about 1 month. Nevertheless, the conditional reflex activity remains disturbed. The

Card 1/2

U.S.S.R. / Human and Animal Physiology. Nervous System. T

Abs Jcur: Ref Zhur-Biol., No 5, 1958, 22617.

Abstract: elaboration of reflexes does not take place
(1200 Associations).

In unilateral removal of the caudate body in puppies, there was no assymetry in development of the trunk and the extremities, behavior did not change, but the time required for elaboration of conditional reflexes was prolonged. The section of the corpus callosum, the internal corpuscle and the removal of the anterior lobe of the cerebral hemisphere, does not cause any behavior changes. Section of the corpus callosum does not hinder the elaboration of the activity of conditional reflexes. The author concludes that the activity of conditional reflexes depends upon the caudate bodies.

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KLOSOVSKIY, B. N.; VASIL'YEV, G. A.; VOLZHINA, N. S.

Sequelae in extirpation of the optic thalami; technique for their removal, nervous status, behavior and conditioned reflex activity of dogs lacking the optic thalami. Nauch. trudy Inst. nevr. AMN SSSR no.1:364-372 '60. (MIRA 15:7)

1. Institut neurologii AMN SSSR i Institut pediatrii AMN SSSR.

(OPTIC THALAMUS—SURGERY)
(CONDITIONED RESPONSE)

USSR/Human and Animal Morphology. Circulatory System

S-2

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 31271

Author : Volzhina N.S.

Inst : ~~Not Given~~

Title : Compensatory Hypertrophy of the Vascular Network of the Brain During an Experiment.

Orig Pub : Arkhiv patologii, 1957, 19, No 7, 52-61

Abstract : Compensatory hypertrophy of the vascular plexus was studied in 30 dogs age 2½-3 months. After removal of the vascular network of the lateral ventricles, no perceptible changes occurred in the size of the vascular network of the third ventricle in the course of two weeks. With the removal of the vascular network of the lateral and fourth ventricle, an intensive compensatory growth was observed of the vascular network of the third ventricle, which assumes the function of the separation of liquor. During the simultaneous removal of the vascular network of the lateral and fourth ventricle, the intensity of the growth of the vascular network of the third

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USSR/Human and Animal Morphology. Circulatory System

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Abs Jour : Ref Zhur - Biol., No 7, 1958, No 31271

ventricle is greater than during the two-stage removal. The hypertrophy of the vascular network of the third and lateral ventricles appears to be due to the increase of the quantity of epithelial cells, but there is no increase in their dimensions or of the dimensions of the connective tissue at the base of the vascular network. The epithelial cells during compensatory hypertrophy multiply mitotically.

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U.S.S.R. / Human and Animal Physiology. Nervous Sys- T
tem, Subcortical Nuclei.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 22616.

Author : Klosovsky, B. N., Volzhinina, N. S. Kukhsh-
kina, V. P.

Inst : Not given.

Title : Two Methods of Isolated Bilateral Destruction
of Subcortical Structures, Nucleus Caudatus,
Putamen.

Orig Pub: Bul. eksperm biol. i meditsiny, 1957, 43,
115-118.

Abstract: The extirpation of the nucleus caudatus in dogs
was carried out through trepanation in the area
of the lower venous sinus. The hemispheres were
pushed away and through an incision in the cor-

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U.S.S.R. / Human and Animal Physiology. Nervous Sys- T
tem, Subcortical Nuclei.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 22616.

Abstract: pus collosum, access was made to one of the lateral ventricles. Raising the upper wall of the lateral ventricle the head and the body of the nucleus caudate was exposed. This was extirpated with a bone curette. By another method, through a trepan opening of the upper part of the skull, the brain was raised, the branches of the middle and anterior cerebral arteries were coagulated, which produced necrosis of the nuclei and the putamen.

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PURIN, V.R., VOLZHINA, N.S.

Method for investigating the rate of formation of the cerebrospinal fluid. Vop.neirokhir. 22 no.3:48-50 My-Je '58 (MIRA 11:8)

1. Laboratoriya po izucheniya razvitiya mozga Instituta pediatrii AN SSSR.

(CEREBROSPINAL FLUID,
form. rate. determ (Rus))

Volzhina, N.S.

KLOSOVSKIY, B.N.; VOLZHINA, N.S.

Technic for total ablation of brain vascular plexuses in experimental animals. *Fiziol.zhur.* 44 no.4:386-387 Ap '58. (MIRA 11:4)

1. Laboratoriya po izucheniyu razvitiya mozga, Instituta pediatrii AMN SSSR, Moskva.

(BRAIN, blood supply
vasc. plexuses, exper. ablation technic (Rus))

VOL. 2 - HINDA N.S. VOL. 11/3 Gen. Pathology, etc. Mar 58

801. COMPENSATORY HYPERTROPHY OF THE CHOROID PLEXUS OF THE
BRAIN (Russian text) - Volzhina N.S. - ARKH. PATOL. 1957, 19/7
(52-61) Illus. 9

In 13 dogs aged 2.5-3 months the choroid plexus of the lateral ventricles and of the IVth ventricle were removed, in 17 only the plexus of the lateral ventricles, part of the vascular plexus on one side being left intact in one lateral ventricle of 5 of these animals. The dogs were sacrificed 2 days to 6 months postoperatively. The choroid plexus of the IIIrd ventricle served as a test object for compensatory hypertrophy, which was not observed until 2 weeks postoperatively. Then this hypertrophy developed, especially in experiments with removal of the plexus of both lateral ventricles and the IVth ventricle. Hypertrophy of the epithelial vascular folds and the development of further folds were observed in the anterior portion. Moreover, the cells of the epithelial layer and the cells at the bases of the vascular folds showed mitotic multiplication. In experiments with unilateral total removal of a plexus and partial removal of the contralateral plexus, there was definite hypertrophy of the latter.

Brandt - Berlin (V, 8*)

VOLCHINA, N.S. (Moskva, 117-G, ul. Burdenko, d. 16/12, kv.58)

~~Regeneration of cerebral vascular plexuses~~ [with summary in English].
Arkhnat.gist. i embr. 35 no.1:68-75 Ja-F '58. (MIRA 11:4)

1. Iz laboratorii razvitiya mozga (zav. + chlen-korrespondent AMN
SSSR prof. B.N.Klosovski) Instituta Pediatrii AMN SSSR.
(BRAIN, blood supply,
vasc. plexuses, regen. (Rus))

Volzhina, N.S.

KISELEVA, Z.N. (Moskva); VOLZHINA, N.S. (Moskva)

Experimental hydrocephalus in young rats [with summary in English].
Arkhp.at. 19 no.7:44-52 '57. (MIRA 10:9)

1. Iz otdeleniya izucheniya razvitiya mozga (zav. - chlen-korrespondent AMN SSSR prof. B.N.Klosovskiy) Instituta pediatrii AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. O.D.Sokolova-Ponomareva)
(HYDROCEPHALUS, experimental, in young rats (Rus))

VOLZHINA, N.S.
VOLZHINA, N.S. (Moskva)

Compensatory hypertrophy of cerebral vascular ganglia under experimental conditions [with summary in English]. Arkh. pat. 19 no.7:52-61 '57.
(MLRA 10:9)

1. Iz laboratorii po izucheniyu razvitiya mozga (rukovoditel' - chlen-korrespondent AMN SSSR prof. B.N.Klovovskiy) Instituta pediatrii (dir. - chlen-korrespondent AMN SSSR prof. O.D.Sokolova-Ponomareva) AMN SSSR

(BRAIN, blood supply,
compensatory hypertrophy of vasc. ganglia in exper.
animals (Rus))

KLOSOVSKIY, B.N.; VOLZHINA, N.S.; KUKUSHKINA, V.P.

Two methods of isolated bilateral destruction of subcortical structures including nucleus caudatus and putamen [with summary in English]. Biol. eksp.biol. i med. 43 no.3:115-118 Mr '57. (MIRA 10:7)

1. Iz Instituta pediatrii AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. O.D.Sokolova-Ponomareva) i Instituta navrologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.V.Kononov). Predstavlena deystvitel'nyy chlenom AMN SSSR S.A.Sarkisovym. (BASAL GANGLIA, surg.

globus pallidus, nucleus caudatus & globus pallidus, isolation in animals, technic (Rus))

VOLEZHINSKIY, D.V.

Results of experiments with the new bactericidal lam. Zh. obsh. biol.
12 no.2:158-160 Mar-Apr 51. (CML 20:8)

1. Department of General Biology and Parasitology imeni Academician
Ye.N. Pavlovskiy of the Military Medical Academy imeni Kirov.

YEMEL'YANOV, B.I., inzh., TIMOFEYEV, O.V., inzh.; VOLZHSKIY, V.M., inzh.,
OGORODNIKOV, Yu.N., inzh.

Boring downcast shafts for rod-type timber. Shakht. stroi. 4 no.12:
12-15 D '60. (MIRA 13:12)

1. Leningradskiy gornyy institut.
(Mine timbering)

Материал Volzhinskii, I. A., L'vov, V. N., and Reikhsfeld, V. O.:
Rukovodstvo k prakticheskim zanyatiyam v laboratorii
syneticheskikh kauchukov (Manual for Practical Use in the
Synthetic Rubber Laboratory) Engineering Resistant
Chemical Industrial

3 M A 40072

VOLZHINSKIY, I.A.

VOLZHINSKIY, I.A.; L'VOV, V.N.[deceased]; REYKHSFEL'D, V.O.; SHUR, Ye.I.,
redaktor; ERLIKH, Ye.Ya., tekhnicheskiy redaktor.

[Synthetic rubber laboratory manual] *Rukovodstvo k prakticheskim
zaniatiyam v laboratorii sinteticheskikh kauchukov.* Leningrad, Gos.
nauchno-tekhn.izd-vo khim.lit-ry 1955. 220 p. (MLBA 8:12)
(Rubber, Synthetic)

BOL'SHAKOV, F. D.; VOIZHENSKIY, YE. V.; ALYBINA, S. D.; SOKOLCV, V. G.; KIRICHENKO, F. S.

Fyalkov, Viktor Konstantinovich, d. 1952

In memory of V. K. Fyalkov, Khirurgiia, No. 6, 1952.

Monthly List of Russian Accessions, Library of Congress October 1952 Unclassified

BOI'SHAKOV, F. D.; VOLZHENSKIY, YE. V.; ALYBINA, S. D. SOKOLOV, V. G.; KIRICHENKO, F. S.

Surgeons

In memory of V. K. Fyalkov. Khirurgiya No. 6 1952.

Monthly List of Russian Accessions, Library of Congress October 1952. Unclassified.

KLOSOVSKIY, B.N.; VOLZHINA, N.S.

Functional significance of the caudate nuclei. Vopr. neirokhir.
20 no.1:8-14 Ja-F '56 (MLRA 9:6)

1. Iz otdeleniya izucheniya razvitiya mozga Instituta pediatrii
AMN SSSR.

(BASAL GANGLIA

caudate nuclei, excis. in dogs, unilateral & bilateral)

KLOSOVSKIY, B.N.,; VOLZHINA, N.S. (Moskva)

Growth and behavior of dogs with subcortical nuclei (nucleus caudatus) removed but with intact cerebral cortex. Arkh. pat. 18 no. 1:35-42 '56. (MLRA 9:6)

1. Iz laboratorii razvitiya mozga (zav.-chlen-korrespondent AMN SSSR prof. B.N. Klovovskiy) Instituta pediatrii AMN SSSR.

(PASCAL GANGLIA,

nucleus caudatus, eff. of excis. on growth & behavior of dogs (Rus))

KLASOVSKIY, B.N.; VOLZHINA, N.S.

Method of removal of the nucleus caudatus. *Fiziol.shur.* 42 no.9:
817-819 S '56. (MIRA 9:11)

1. Laboratoriya razvitiia mozga Instituta pediatrii Akademii
meditsinskikh nauk SSSR, Moskva
(BASAL GANGLIA, surgery.
excis. of nucleus caudatus in exper. animals, technic
(Rus))

KISELEVA, Z.N., VOLZHINA, N.S.

Hydrocephalus

Changes in the capillary network in experimental hydrocephalus in puppies 16 days to 1 $\frac{1}{2}$ months old. Zhur. nevr. i psikh, 52 no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED

KISELEVA, Z.N., VOLZHINA, N.S.

Hydrocephalus

Changes in the capillary network in experimental hydrocephalus in puppies 16 days to 1 $\frac{1}{2}$ months old. Zhur. nevr. i psikh. 52 no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952, UNCLASSIFIED

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Hydrocephalus

Changes in the capillary network in experimental hydrocephalus in puppies 16 days to 1 $\frac{1}{2}$ months old. Zhur. nevr. i psikh. 52 no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED

ZASOSOV, V.A.; METEL'KOVA, Ye.I.; VOLZHINA, O.N.; SHAGALOV, L.B.; VLASOV, A.S.

New method of producing norsulfazole. Med. prom. 17 no.9:15-22
S'63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni Sergo Ordzhonikidze.

VOLZHINA, V.

PA 4T104

USSR/Medical Science
Cytology

1945

"Microsurgical Investigation of the Smooth Muscle Cell and Its Fibrils,"
G. Roskin and V. Volzhina, 3 pp

"CR Acad Sci" Vol XLIX, No 6

Observations, with the aid of the Peterfi micromanipulator, of the smooth muscle cell, to clarify the exact nature and verify the existence of the cell fibrils as definite individualized formations.

VOLZHINSKI, D. V.
VOLZHINSKI, D. V.

"Results of Trials on a New Bactericidal Lamp." (p. 158) by Volzhinski, D. V.

SO: Journal of General Biology XII (Zhurnal Obshchei Biologii) Vol. XII, No.2, 1951.

VOLZHSKIY, V.M., inzh.; ROGINSKIY, V.M., inzh.

Peculiarities of reinforced concrete rod bolting without
compressed air. Izv. vys. ucheb. zav.; gor. zhur. 8 no.7:
52-56 '65. (MIRA 18:9)

1. Leningradskiy ordena Lenina i ordena Trudovogo Krasnogo
Znameni gornyy institut imeni Plekhanova. Rekomendovana
kafedroy stroitel'stva gornykh predpriyatiy.

VOLZHSKIY, V.M., inzh.; YEMEL'YANOV, B.I., inzh.

Reinforced concrete rod-type timber for controlling the
heaving of the base of workings. Shskht. stroi. 4 no.6:15-17
Je '60. (MIRA 13:11)

1. Leningradskiy gornyy institut.
(Mine timbering)

VOLZHSKAYA, A.M.

Comparison of the hemopoietic activity of serum with its vitamin B₁₂ content. Probl. gemat. i perel. krovi 8 no.7:22-24 JI '63.

(MIRA 17:10)

1. Iz terapevticheskogo sektora (zav. - prof. A.Ya. Yaroshevskiy)
Institut fiziologii imeni I.P.Pavlova (dir. - akademik V.N.Cherni-
govskiy) AN SSSR.

VOLZHSKIY, V.M., inzh.

Signaling device for rod bolting. Shakht. stroi. 8 no.10:
22-23 0 '64. (MIRA 17:12)

1. Leningradskiy gornyy institut.

DVORKIN, Ye.I., inzh.; DEMETRIADES, G.K., inzh.; VOLZHSKIY, V.M., inzh.

Using high frequency currents for hand-held electric drills for
drilling blast holes. Nauch. dokl. vys. shkoly; gor. delo no.1:
177-182 '59. (MIRA 12:5)

1. Predstavlena kafedroy stroitel'stva gornyykh predpriyatiy
Leningradskogo gornogo instituta im. G.V. Plekhanova.
(Boring machinery--Electric driving)
(Electricity in mining)

~~VOLZHEVSKIY~~, V.M., inzh.

Use of rod anchoring in shale mines. Izv. vys. ucheb. zav.; gor.
zhur. no.1:38-44 '58. (MIRA 11:5)

1. Leningradskiy gornyy institut.
(Mine roof bolting)

VOLZHSKIY, V.M., gornyy inzh.

Practices of using rod bolting in the Yarega petroleum mines.
Gor. zhur. no.4:37-39 Ap '61. (MIRA 14:4)

1. Leningradskiy gornyy institut.
(Yarega region—Petroleum mining) (Mine roof bolting)

VOLZHSKIY, V.M., inzh.

Controlling the bearing capacity of the rod-type timber. Shakht.
stroil. 4 no.3:12-14 Mr '60. (MIRA 13:11)

1. Leningradskiy gornyy institut.
(Mine timbering)

VOLZHSKIY, V.M.

Apparatus for determining the roof rock pressure in horizontal
workings reinforced by rock bolting. Gor. zhur. no.11:73 N '63.
(MIRA 17:6)

VOLZHSKIY, V.M., inzh.; PODOLYAKO, N.I., inzh.

Automatic drill with force feed for boring blast holes in mining.
Izv. vys. ucheb. zav.; gor. zhur. no.11:60-65 1959. (MIRA 14:5)

1. Leningradskiy ordena Lenina i ordena Trudovogo Krasnogo
Znameni gornyy institut imeni G. V. Plekhanova. Rekomendovana
kafedroy stroitel'stva gornyykh predpriyatiy.
(Rock drills)

SEMEVSKIY, V.N., doktor tekhn.nauk, prof.; BAKHIN, F.S., inzh.; VOLZHISKIY,
V.M., inzh.

Controlling the safety of strata bolting. Bezop.truda v prom.
4 no.12:4-5 D '60. (MIRA 14:1)

1. Nachal'nik upravleniya Severo-Zapadnogo okruga Gosgortekhnadzora
RSFSR (for Bakhin). 2. Leningradskiy gornyy institut (for Volzhskiy).
(Mine roof bolting—Safety measures)

VOLZHSKIY, V.M.; PANCHESHNIKOV, M.Ye.

Anchor bolting in slate mines. Ugol' 36 no.4:14-17 Ap '61.
(MIRA 14:5)

1. Leningradskiy gornyy institut (for Volzhskiy). 2. Zavod po
mekhanizatsii i remontu energeticheskogo i tekhnologicheskogo
oborudovaniya Upravleniya khimicheskoy promyshlennosti Lensovnarkhoza
(for Pancheshnikov).

(Mine roof bolting)

VOLZESKIY, V.M.

Expansion lock for rod bolts. Biul. TSIICM no.2:45 '61.
(MIRA 14:9)
(Mine roof bolting--Patents)

VOLZHSKIY, V.M., inzh.

Bearing capacity and permissible pliability of rod bolting.
Izv. vys. ucheb. zav.; gor. zhur. no.5:25-30 '61.
(MIRA 16:7)

1. Leningradskiy ordena Lenina i ordena Trudovogo Krasnogo
Znameni gornyy institut imeni G.V. Plekhanova. Rekomendovana
kafedroy stroitel'stva gornykh predpriyatiy.
(Mine roof bolting)

VOIZHSKIY, V.M., inzh.

Feed for drilling vertical holes in a mine top. Shakht. stroi.
5 no.10:23-24 0 '61. (MIRA 16:7)

1. Leningradskiy gornyy institut.
(Boring machinery)

SEMEVSKIY, Vladimir Nikolayevich, prof., doktor tekhn. nauk;
VOLZHSKIY, Vladlen Nikhaylovich, gornyy inzh.;
TIMOFEYEV, Oleg Vladimirovich, dots., kand. tekhn. nauk;
SHIROKOV, Anatoliy Pavlovich, kand. tekhn. nauk;
KRAVCHENKO, Grigoriy Ivanovich, kand. tekhn. nauk;
CHUKAN, Boris Karpovich, kand. tekhn. nauk; ETINGOV,
Semen Isayevich, gornyy inzh.; NESTERENKO, G.T., kand.
tekhn. nauk, retsenzent

[Rod bolting] Shtangovaya krep'. Moskva, Nedra, 1965.
327 p. (MIRA 18:7)

1. Zaveduyushchiy kafedroy Leningradskogo gornogo instituta im. G.V.Plekhanova (for Semevskiy). 2. Leningradskiy gornyy institut im. G.V.Plekhanova (for Volzhskiy, Timofeyev).
3. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut (for Shiroko.).

B.A.

III-24

Influence of presence of hygroscopic substances on activity of enzymes on air-dried substrates. M. P. Mashkovtsov, G. P. Volosinov, and M. T. Potkin (Biotekhnika, 1951, 19, 24-25).— A starch paste-maltase mixture was prepared, dried in the air, and the maltase activity followed by means of the appearance of reducing substances as the drying process continued, until the enzyme activity ceased. The atm. humidity at which enzyme action ceased could be altered by the presence of salts (NaCl, CaCl₂, etc.) added to the starch-maltase mixture. D. H. SMYTH.

CEPULIC, P.; VOMAC, V.; RUZDIC, I.

Filter paper electrophoresis in the determination of
Changes in blood protein levels in schizophrenia.
Neuropsihijatrija 2 no.4:221-239 1954.

1. Aus dem chemischen Laboratorium des Krankenhauses Vrapce
und dem zentralen chemischen Laboratorium der Stadt Zagreb.

(SCHIZOPHRENIA, blood in,
blood protein determ. by paper electrophoresis.(Ger))

(BLOOD PROTEINS, determ.
in schizophrenia, paper electrophoresis. (Ger))

(ELECTROPHORESIS,
of blood proteins in schizophrenia, filter paper
technic.(Ger))

VOMACKA, M.

"Improving the Repair Train." p. 19. "The Rationalizers' Movement As Shown in the Figures and in the Work of the Five Most Successful Innovators." p. 19. "The Rationalization of Work At the Waterworks of Slany." p. 19 (ZELEZNICE, Vol. 3, No. 1, 1953) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4, April 1954. Unclassified.

VOMACKOVA, V.

History of Sudeten Germans yesterday and today. Vestnik CSAV 71 ,
no.1:94-96 '62.

VOMAR, Ivo

Director, Vet. Station, Celje

(Vet. Artificial Insemination)

Memo Chief Contact Div. oo, Aug. 18, 1953 #14877 Rest.

VOMASEK, F.; BIDLO, Z.

VOMASEK, F.; BIDLO, Z. Stability of lemon essences and syrups p. 422

Vol. 7, no. 9, 1956
PRUMYSL POTRAVIN
TECHNOLOGY
Praha, Czechoslovakia

So: East European Accession, Vol. 6, No. 2, 1957

VOMASTEK, Frantisek

Complexity and solution of the labor productivity increase.
Podn org 18 no.7;2 of cover, 3 of cover J1 '64.

1ST AND 2ND COVERS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH COVERS									
S																				7									
<p>The Electric Furnace and its Products in the U.S.S.R. C. H. Vom Baur. (Electrochemical Society, May, 1953, Preprint No. 63-35). According to the author the number of electric furnaces operating in Russia by the end of 1951 will be 419. The steel furnaces will have an annual capacity of over 1,500,000 tons, representing about 15 per cent. of the total steel output. The number of electric furnaces built or building is shown. Most of the furnaces are of the Héroult type.</p>																													
<p>ASM-11A METALLURGICAL LITERATURE CLASSIFICATION</p>																													
FROM SYMBOLS										FROM SYMBOLS										FROM SYMBOLS									
1 2 3 4 5 6 7 8 9 10										1 2 3 4 5 6 7 8 9 10										1 2 3 4 5 6 7 8 9 10									

760. Vomela S. Brevno vidy po skopolaminu (L'ianthinopsie scopolaminique)
Chromophose after scopolamine Prakticky Lekar 1947, 27/5 (97-98)

Autoexperiments after instillation of 5 drops of a solution of scopeolamine hydrobromide (0.02: 10,000) into the left eye. The mydriasis accompanied by chromophose lasts six days. The borders of objects appear to be coloured violet or blue. Chromophose is perceptible by binocular vision and disappears on closing the treated eye.

Karasek-Prague

So: Physiology, Biochemistry & Pharmacology, Section II, Vol. 1, #1-6

ACC NR: AP6032832 (A) SOURCE CODE: CZ/0078/66/000/007/0022/0022

AUTHOR: Vomlel, Otokar (Dobroustov); Kusak, Frantisek (Zbysov); Stefan, Ladislav (Engineer; Jihlava)

ORG: none

TITLE: Lubrication equipment for flyball governors. CZ Pat. no. PV 5356-65

SOURCE: Vynalezky, no. 7, 1966, 22

TOPIC TAGS: internal combustion engine component, lubrication equipment, injector pump

ABSTRACT: A device is introduced for lubricating mechanical flyball governors which control injector pumps in combustion engines. Fins are arranged inside the governor's box to drain oil spattered into the pipe by the rotor. One end is placed in the governor's box and the other in the axis of the control pin which is equipped with channels connected to the channels in the supporting pin, the grooves shaped in the periphery of the supporting pin, and to the channels in the weight support.

SUB CODE: 21/ SUBM DATE: 31Aug65/

Card 1/1

MALYSHEV, V.I.; MARKIN, A.S.; PETROV, V.S.; LEVKOYEV, I.I.; VCMPE, A.F.

A neodymium-glass laser with a monopulse duration near the limit.
Pis'. v red. Zhur. eksper. i teoret. fiz. 1 no.6:11-14 Je '65.

(MIRA 18:10)

1. Fizicheskiy institut imeni Lebedeva AN SSSR.

L 3837-66 EWT(1)/T/EED(b)-3 LJP(c)
ACCESSION NR: AP5017496

UR/0368/65/002/006/0558/0561
771.534

AUTHOR: ^{44,55} Rheyman, A. S.; ^{44,55} Karaul'shchikova, R. V.; ^{112,55} Volkova, G. S.; ^{44,55} Paryanova, N. M.; ^{44,55} Solov'yev, S. M.; ^{44,55} Voznes, A. F.; ^{44,55} Aleksandrov, I. V.; ^{44,55} Kurepina, G. F.; ^{44,55} Ivanova, L. V.

TITLE: Infrachromatic materials for scientific and technical purposes

SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 6, 1965, 558-561

TOPIC TAGS: IR photography, photographic emulsion, photographic processing

ABSTRACT: The article summarizes the photographic properties of new infrachromatic films and plates developed at NIKPI (Scientific Research Institute of Motion Picture Photography) to increase the stability and sensitivity of infrachromatic materials used for spectroscopy, astro-photography, and other scientific purposes. Tables of the photographic characteristics of the films and plates are listed, and spectral sensitivity curves are given for all the emulsions. The appropriate development techniques are also discussed. The individual films are compared with those produced by Eastman Kodak. It is recommended in the conclusion that the available assortment of infrachromatic emulsions (11 types in the USSR) be reduced, since Eastman produces only four types which seem to meet all the requirements. Orig. art. has: 3 figures and 4 tables.

Cord 1/2

L 3837-66
ACCESSION NR: AP5017496

ASSOCIATION: none

SUBMITTED: 16 Feb 65

NR REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: 3P, 02

beh
Card 2/2

[illegible]

LEVKOYEV, I.I.; SVESHNIKOV, N.N.; GORBACHEVA, I.N.; VOMPE, A.F.

Optical properties of some thiocarbocyanines with substitutes in heterocyclic radicals. Trudy NIKFI no.7:25-33 '47. (MIRA 11:6)

1. Sinteticheskaya laboratoriya Nauchno-issledovatel'skogo kino-foto-instituta, Moskva.
(Thiocarbocyanine--Optical properties)

10

Cleavage of the pyridine ring. Reaction of quaternary salts of the pyridine and quinoline series with aromatic amines. Complexes of quinoline chlorobenzylate with aromatic amines. A. P. Yanyg, *Doklady Akad. Nauk S.S.S.R.* 60, 851-6 (1948). — In order to clarify the results claimed by Mikhailenko and Minol'ev (*C.A.* 24, 5783) alc. solns. of quinoline-1-PhCH₂Cl (I) were heated with equimolar or excess amts. of various amines. In all cases the products obtained corresponded to C₁₁H₉N(CH₂Ph)Cl₂NC₆H₄R·p, where R was Me, Cl, Br, I, SO₃, OMe, and OEt. The products may be assigned the structure

on this basis. However, further study showed that the alc. solns. of the products are decolorized by diln. with H₂O, with pptn. of I in an amt. which corresponds to the empirical formula, while the soln. yields the initial amine. The products are slowly broken down in alc. by salts of heavy metals (Cu and Hg), as well as by water. This indicates the products have the structure of a complex.

Ultraviolet absorption study showed that the quinoline nucleus remains intact and that the complexes are dissolved in soln. Treatment of the product from *p*-toluidine with 2,6-dimethylquinoline-Mel in EtOH-EtONa gave the same isocyanine as is obtainable from I directly, thus again showing the complex-type structure of the product. Ortho- and meta-substituted aromatic amines (toluidines, chloro- and bromoanilines, and xylenes) do not give cryst. products with I, but the solns. have a color which indicates similar complex formation. The product described by M. and M. was shown to be merely a mixt. of the quaternary salt with the amine. The results are contrary to Emmert's (Emmert, *et al.*, *C.A.* 25, 5426) ideas on inability of quaternary quinoline salts to form complexes with monoamines. It is probable, on the basis of resonance considerations, that the atoms involved in the complex formation are the 2- and 4-C atoms of the pyridine nucleus.

G. M. Kozolapoff

Sci. Res. Cine Photo Inst.

ADD. 15.4 DETAILING LITERATURE CLASSIFICATION

1ST AND 2ND EDITION		PROCESSED AND PROPERTIES INDEX		10	
<p style="font-size: 2em; margin-left: 20px;">CA</p> <p>Cleavage of the pyridine ring. Synthesis of chlorodinitrophenylates of substituted pyridines and their reaction with aromatic amines. A. P. Yompe and N. F. Turitsyna. <i>Doklady Akad. Nauk S.S.S.R.</i> 64, 341-4(1949); cf. C.A. 43, 645c.—Heating equimolar amts. of pyridine bases with 2,4-(O₂N)₂C₆H₃Cl without solvent or in dry Me₂CO 5-16 hrs. gave the quaternary salts of pyridines with 3-Me, 3-HO, 3-MeO, 3-AcNH, 3-MeN, 3-I, 3-EtNCO, 4-AcNH, and 4-PhNH substituents. No addn. with 3-Cl, 3-Br, 3-NO₂, and 3-EtOC derivs. took place and very little with 4-EtOC derivs. under these conditions. A little adduct was formed when heating to 100-30° in sealed tubes was used with the 3-Br and 3-EtOC derivs. The pyridinium compts. obtained were allowed to react with aromatic bases. The course of the reaction depends on the substituents and on the temp. Weakly electropos. groups (Me, OMe, NHAc) in the 3-position at 0-10° lead to ring cleavage and give (in EtOH) a lower yield of the products than obtained from unsubstituted pyridine. Strongly electropos. groups prevent cleavage entirely. Heating the quaternary salts in EtOH with PhNH₂ leads to disocn. at the N—C₆H₄(NO₂)₂ bond, when the substituents in the 3-position are Me, OH, OMe, NHAc, NMe, or in the 4-position NHAc or NHPh. This disocn. yields dinitrodiphenylamine, accompanied in the last 2 cases by colored products of complex nature. The yield of the dinitrodiphenylamine is max. (65%) for the 3-MeN deriv. at 50-60°, although no reaction takes place in the cold. Transposition of the electropos. group to the 4-position further stabilizes the C-N bonds in the ring, and the 4-AcNH deriv. is not attacked by PhNH₂, even on heating. The results of the nucleophilic attack of PhNH₂ are explained by the variation of pos. charge at the 3-position of the pyridine ring caused by the substituent groups (electropos. groups increase the charge and increase the rate of ring cleavage). G. M. Kosolapoff</p>					
<div style="float: left; width: 15%;">ASB-SLA</div> <div style="float: right; width: 15%;">RESEARCH DIVISION</div> <div style="clear: both;"></div>					
<div style="float: left; width: 15%;">METALLURGICAL LITERATURE CLASSIFICATION</div> <div style="float: right; width: 15%;">RESEARCH DIVISION</div> <div style="clear: both;"></div>					
<div style="float: left; width: 15%;">RESEARCH DIVISION</div> <div style="float: right; width: 15%;">RESEARCH DIVISION</div> <div style="clear: both;"></div>					

1ST AND 2ND EDITIONS
PROCESSES AND PROPERTIES INDEX

1CA

Closure of the pyridine ring. Synthesis of chloro-
electrophyl derivatives of 4-alkoxy-, 4-methylmercapto-
and 4-phenoxy-pyridines and their reactions. A. F.
Vompe, N. P. Turitsyna, and I. I. Levinov. *Doklady
Akad. Nauk S.S.S.R.* 65, 839-42 (1949); cf. C.A. 43,
4671a. -- 1-(2,4-Dinitrophenyl)-4-alkoxypyridinium chlo-
rides were prepd. with Me, Et, Pr, Bu, and iso-Am groups
in the alkoxy radical. 4-Methoxypyridine with 2,4-
(O₂N)₂C₆H₃Cl without solvent or in Me₂CO above 50°
gave 2 products: a colorless pyridinium salt of the above
type and a water-insol., yellow, halogen-free solid, m. 208°
identified as 1-(2,4-dinitrophenyl)-6(III)-pyridone,
9°, identified as 1-(2,4-dinitrophenyl)-6(III)-pyridone,
formed by loss of MeCl. Heating of the higher alkoxy
derivs. to 100-53° gave in all cases a loss of RCl and
formation of the above pyridone. A similar reaction
takes place immediately upon contact of 4-hydroxy-
pyridine and 2,4-(O₂N)₂C₆H₃Cl (loss of HCl). The
(O₂N)₂C₆H₃ radical severely lessens the bonding of R in
the 4-OR group; the methiodides lose RI only at 151°.
The 4-MeS analog pyrolyzed less readily, but some crude
1-(2,4-dinitrophenyl)-6(III)-pyridinedithione was obtained.
The 4-PhO deriv. gave 4-phenoxy-pyridine and 2,4-(O₂N)₂-
C₆H₃O. The alkoxy derivs. were treated with aromatic
amines in order to further study the bond strengths in
OR groups. The MeO deriv. with PhNH₂ in EtOH at
10-15° gave a red solid, m. 213°, which on heating with
Me₂CO or on pptn. from EtOH by Et₂O gave a yellow
solid, m. 241°, identified as 1-(2,4-dinitrophenyl)-4-
aminopyridinium chloride, while the red product is a mol.
adduct of the latter and PhNH₂. A similar reaction takes
place with other RO derivs., as well as PhO and MeS
derivs., and proceeds well even at 10°. When the MeO
deriv. is heated with PhNH₂ in EtOH, (O₂N)₂C₆H₃NHPh
is formed, also when the red or the yellow products (above)
are heated with alc. PhNH₂. G. M. Koslapoff

Common Variables Index

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SOURCE SYMBOLS

SYMBOLS MAY ONLY GOE

COLLECTIONS

SYMBOL ONE ONLY IIII

CA

Basicity of aminopyridines. Reaction of aminopyridines with 2,4-dinitrochlorobenzene. N. F. Turitsyna and A. F. Vompe (All Union Cine-Photo Inst., Leningrad). *Doklady Akad. Nauk SSSR*, 74, 140-142 (1950).—3-Aminopyridine reacts even at 18° in MeCO with 2,4-(O₂N)₂C₆H₃Cl (II), yielding a yellow product, C₁₁H₁₀O₂N₃Cl (I), m. 226° (from EtOH), having ionic Cl, but which is not an HCl salt as it cannot be titrated with alkali carbonates; hence the product, also obtained by hydrolysis of 3-acetamido-1-pyridine-(O₂N)₂C₆H₃Cl, is 3-amino-1-(2,4-dinitrophenyl)pyridinium chloride, i.e. a quaternary salt at the nuclear N. Hence, in 3-aminopyridine the nuclear N has higher basicity

than the amino-N atom. MeI similarly gives the nuclear methiodide, m. 123°, obtainable also by hydrolysis of 3-acetamidopyridine-MeI. Acetylation of I proved to be impossible, as was the introduction of a 2nd unit of II. With 4-aminopyridine the reaction proceeds even at room temp., yielding 4-amino-1-(2,4-dinitrophenyl)pyridinium chloride, m. 201°; careful treatment with alkali yields the corresponding 1-(2,4-dinitrophenyl)-N(III)-pyridinium, m. 17-18° in 6 hrs. gave only 3.5% corresponding pyridinium chloride, showing that introduction of NH₂ into the 3- or 4-position increases the activity of the nuclear N. The II compds. of 3- and 4-aminopyridines react with PhNH₂ at 0-10° in EtOH very slowly, yielding 2,4-(O₂N)₂C₆H₃NHPh (the 3-isomer gave an 80% yield only after 1.5 years at room temp.), but heating accelerates the process; the 4-isomer reacts slower. This stability of the nuclear C-N link is caused by increased electron density at the C atoms in the 2,2'-positions, and in the 1-position 2-Aminopyridine does not form a II compd., apparently because of steric effects, and gives only the product, m. 174°, apparently 2-(2,4-dinitrophenyl)amino-pyridine. G. M. Kosolapoff

1951

VOMFE, A. F.

VOMFE, A. F. - "Splitting of Pyridine Bases." Sub 1 Jul 52, Inst of Organic Chemistry, Acad Sci USSR. (Dissertation for the Degree of Doctorates in Chemical Sciences).

SO: Vechernaya Moskva January-December 1952

VOMPE, A. F.

USSR/Chemistry - Photographic Dyes

May 52

"Investigations in the Field of Cyanine Dyes, VII. The Properties of Tetramethyl Thiocarbocyanines," I. I. Levkoyev, A. F. Vompe, N. N. Sveshnikov, N. S. Barbyn, All-Union Sci-Rec Cinematograph Inst

Zhur Obshch Khim, Vol 22, No 5, pp 879-886

Authors produced 23 symmetrical tetramethyl thia-carbocyanines with methyl groups in different positions on the benzene nucleus of the heterocyclic radical. They obtained 2,4,5-, 2,4,7-, 2,5,7-trimethylbenzthiazoles and some of their derivs. In the transition from dimethyl to tetramethyl

263T38

thiocarbocyanine, the transmittance max of the dye was shifted to the long-wave portion of the spectrum in all cases. The introduction of the methyl groups at the 5,5' and 6,6' position gives a markedly greater bathochromic effect.

263T38

VOMPE, A.F.

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Photography

Cyanine dyes. VII. The properties of tetramethyl-
thiacarbocyanines. A. I. Leukoy, A. P. Vompe, N. N.
Svchinnikov, and K. S. Barvyn. J. Gen. Chem. U.S.S.R.
22, 630-4 (1952) (Engl. translation).—See C.A. 46, 10985g.
H. L. H.

VOMPE, A.F.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Levkoyev, I.I.	"Investigations in the Field of Polymethine Eyes"	Ministry of Culture USSR
Sveshnikov, M.N.		
Vompe, A.F.		
Portnaya, E.S.		
Spasokukotskiy, N.S.		
Daychmeyster, M.V.		

SO: W-30604, 7 July 1954

1. N. N. SVESHNIKOV, I. I. LEVKCEV, A. F. VOMPE, B. S. PORTNAYA

2. USSR (600)

4. Carbon Compounds

7. Products of reaction of acylmethylene derivatives of N-substituted heterocyclic radicals with alkylating agents and their reactions. Dokl. AN SSSR 88 no. 2. 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

79-12-23/43

AUTHORS: Vompe, A. F., Turitsyna, N. F.

TITLE: Reactions of Pyridine salts (Reaktsii piridiniyevykh soley).
The Synthesis of the Chlorodinitrophenylates of Substituted Pyridine
Bases (Sintez khlordinitrofenilatov ~~zameshchennykh~~ piridinovykh osnovaniy).

PERIODICAL: Zhurnal. Obshchey Khimii, 1957, Vol. 27, Nr 12, pp. 3282-3290 (USSR).

ABSTRACT: Disregarding the many works dedicated to the decomposition of the pyridine ring until now the influence of the substituents (in the ring and at the cyclic nitrogen atoms), of the nature of the amine and other factors on the tendency of the pyridine ring to decompose and the influence on the reaction course were not explained. Also not investigated is the reaction formation of pyridine salts which have substituents in the nucleus of pyridine. Therefore, first of all, the formation of chloro-(2,4-dinitro)phenylate of the substituted pyridines was tackled. The reaction of the pyridine radicals with 2,4-dinitrochlorobenzene was, as a rule, carried out by means of heating the equimolecular compound of the components in dry acetone or without solvents. Easily obtained were the chlorodinitrophenylates of the substituted pyridines (see formula). As usual, however, (heating in a water bath with a return condenser) it was not possible to combine dinitrochlorobenzene with β -chloro, β -bromium, β -nitropyridine and with ethylester of nicotinic acid. Thus the predispo-

Card 1/2

Reactions of Pyridine salts.

79-12-23/43

The Synthesis of Chlorodinitrophenylates of Substituted Pyridine Bases.

sition of the ring nitrogen atom to a transition to the tetravalent positive state of formation with the introduction of the substituents with a clearly characterized electronegative character to the β - and γ - position in the pyridine nucleus is decreased. The compound of dinitrochlorobenzene with β -iodopyridine and with the diethylamide of nicotinic acid, however, took place rather quickly on the water bath.

Thus the introduction of the electropositive substituents to the β - or γ - position in the pyridine ring makes easier the affiliation with the ring nitrogen atoms of the 2,4-dinitrochlorobenzene molecule, whereas the electro-negative substituents make more difficult the process in the same position. The characteristics as well as some reactions of chlorodinitrophenylate of the substituted radicals were described. There are 27 references, 3 of which are Slavic.

ASSOCIATION: The All-Union Scientific Research Institute of Cinema- and Photography. Institute for Organic Chemistry AN USSR (Vsesoyuznyy nauchno - issledovatel'skiy kinofotoinstitut. Institut organicheskoy khimii Akademii nauk SSSR).

SUBMITTED: November 13, 1956.

1. Pyridines-Chemical reactions 2. Cyclic compounds-Synthesis
Card 2/2 3. Chlorodinitrophenylates-Synthesis

Vompe, A. F.

20-5-28/60

AUTHOR
TITLE

PERIODICAL

ABSTRACT

VOMPE, A.F., TURITSYNA, N.F.,
Cleavage of Pyridine Bases, Mechanism of Reaction.
(Mekhanizm reaktsii rasshchepleniya piridinovykh osnovaniy-Russian)
Doklady Akademii NaukSSSR, 1957, Vol 114, Nr 5, pp 1017-1020 (U.S.S.R.)

In spite of a considerable number of works which dealt with the break-up of the pyridine ring, the mechanism of this reaction has hitherto not been clarified. It is known that the cleavage reaction of pyridine-chloro-dinitrophenylate and -bromocyanide takes place at a very high speed and leads to the formation of the dianyl salts of glutacetaldehyde. From the interaction of pyridine-chloro-dinitrophenylate with primary or secondary fatty amines there result cleavage products of only one nitrogen-carbon linkage in the pyridine ring. None of the authors who worked on these problems succeeded in converting the substances obtained by him into symmetric derivatives of glutacetaldehyde with two amine rests. Thus it remained uncertain whether the cleavage reaction of pyridine proceeds through the stage of an intermediate compound, or whether the separation of a nitrogen atom from the pyridine ring occurs all at once, that is as a consequence of a simultaneous interaction of a pyridinium salt with two amine molecules. In order to investigate the cleavage mechanism, the authors performed the cleavage of various pyridine bases with bromocyan and tetrahydroquinoline. In all instances there resulted, on the whole, cyanamines. This indicates that the reaction is the same for various pyridine bases. The simultaneous formation of ditetra-

Card 1/3

20-5-28/60

Cleavage of Pyridine Bases, Mechanism of Reaction.

hydroquinolides gave rise to the supposition that the cyanimines play the role of intermediate products in this reaction. It remained uncertain, however, whether, on the whole, no final cleavage products but only intermediate compounds are obtained. In order to prove that cyanimines are intermediate products of the break-up, the authors endeavored to convert them into symmetric ditetrahydroquinolides. This was successful and confirmed the nature of cyanimines to be that of intermediate products. The prevalent formation of cyanimines can be explained by the high cleavage rate of the C--N-linkage in the ring, which surpasses that of the cleavage of the C--N-linkage in the cyanimine molecule. Their poor solubility in acetone or ether also explains why this happens. From this it follows that on an increase of solubility of a cyanimine-derivative the amount of ditetrahydroquinolide in the reaction mixture must increase. A good yield could also be achieved in ethanol and methanol. An addition of aniline-chlorohydrate accelerated and increased the yield of aniline-bromohydrate. This was quite incomprehensible. Apparently there developed in connection with the cleavage of 3-chloropyridine a cyanimine that is hard to dissolve in ether. In the production of cyanimines from 3-substituted pyridines the formation of 2 isomers should be expected. Hitherto there existed only one. It seems that here for the most part only one of the C α --N-linkage is broken. The position of the substituents of these derivatives has not been clarified. It may be assumed that they are in an α -position towards the CH=NCH-

Card 2/3

20-5-28/60

Cleavage of Pyridine Bases, Mechanism of Reaction.

-group. Cyanimine of β -methoxyglutonaldehyde was isolated in two forms, one of them being of a bright red and the other one of a bright yellow. Their composition and practically also their melting points were identical. The same was observed in the case of the analogous β -ethoxy-compound. The dimorphism of the salts of these aldehydes is known. Perhaps this also occurs in the case of the cyanimines here studied. However, the possibility of a cis-trans isomerism must also be taken into consideration. This should be especially examined.

(1 Slavic reference).

ASSOCIATION

Allunion Scientific Research Institute for Cinema and Photography
Institute "N.D. Zelinskiy" for Organic Chemistry of the Academy of
Science of the U.S.S.R.

PRESENTED BY

SUBMITTED

AVAILABLE

Card 3/3

28.1.1957

Library of Congress.

AUTHORS: Vompe, A. F., Monich, N. V.,
Turitsyna, N. P., Ivanova, L. V.

20-114-6-27/54

TITLE: New Conversions of Pyridine Salts and the Synthesis of
 γ -Substituted Pyridines (Novyye prevrashcheniya piridiniyevykh
soley i sintez γ -aminozameshchennykh piridinov).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 114, Nr 6, pp. 1235-1238 (USSR)

ABSTRACT: The authors earlier made the attempt of cleaving the
pyriding ring in α -alkoxy-, phenoxy- and methylmercapto-
substituted pyridines by the influence of aromatic amines
upon chloro- (2,4-dinitrophenylate) of the pyridine bases (I).
It became evident that the ring cannot be cleft, but that a
replacement of the alkoxy- (or of the methyl-mercapto- or
phenoxy-)group by the residue of the aromatic amine under
formation of chloro- (2,4-dinitrophenolates) of γ -arylamino-
pyridines (II) takes place (reference 1). In their further
work the authors succeeded in cleaving the pyridine ring
by acting upon γ -alkoxy (methylmercapto-, phenoxy-) pyridines
with bromocyanogen and aromatic amines (reference 2). Thus
they obtained dialkyl-salts of the β -alkoxy (methylmercapto-,
phenoxy-)substituted glutacon - aldehydes (III). These and

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further conversions may be considered a special case of the general replacement reactions of the γ -alkoxy (phenoxy)-groups by the residues of aromatic amines in pyridine salts which contain electronegative radicals ($C_6H_5(NO_2)_2 \rightarrow C_6H_5 -$) at the cyclic nitrogen (reference 1). By conjugation of the π -electrons of the oxygen atom in the group $-OAlk(-OC_6H_5)$ with the residual part of the pyridine-salt molecule these compounds are given the property of oxonium salts (reference 5). The authors became interested in the problem of the mobility of the alkoxy group in the γ -alkoxypyridine-haloidalkylates. It was found that in interactions of γ -methoxypyridine-iodomethylate with aniline (in an alcohol solution in the water bath) methyl iodide is split off and N-methyl- γ -pyridone is produced. Thus the transition of the cyclic nitrogen atom into the tetravalent state alone is not enough to impart the capability of substitution to the alkoxy group. Besides, an electronegative radical must exist at this atom. Furthermore the capability of substitution of the phenoxy groups toward residues of the aromatic amines in γ -phoxypyridine-iodomethylate were also investigated. This

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exchange easily takes place on heating of a mixture of the haloid-hydrogen salt of γ -phenoxypyridine or of the salt of the aromatic amine with γ -phenoxypyridine. This exchange does, however, not take place on heating of a salt mixture of γ -phenoxypyridine and of aromatic amine. From this follows that the γ -phenoxypyridine cation and a free amine participate in the reaction. In the same manner the phenoxy group can be replaced by the amino group and by residues of the primary and secondary aliphatic amines. Thus γ -cyclohexyl-aminopyridine and γ -dimethylaminopyridine were synthesized. γ -aminopyridine easily develops on heating of γ -phenoxypyridine with ammonium chloride. The latter reaction offers several advantages in comparison to those known (references 7,8). There are 11 references, 3 of which are Slavic.

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New Conversions of Pyridine Salts and the Synthesis of
 γ -Substituted Pyridines

20-114-6-27/54

ASSOCIATION: Allunion Scientific Research Institute for Motion-Picture
and Photography (Vsesoyuznyy nauchno-issledovatel'skiy
kinofotoinstitut).
Institute for Organic Chemistry AS USSR imeni N. D. Zelinskiy
(Institut organicheskoy khimii im. N. D. Zelinskogo Akademii
nauk SSSR).

PRESENTED: June 19, 1957, by A. N. Nesmeyanov, Academician

SUBMITTED: June 18, 1957

ATTACHED: 13.07.1957, 13.07.1957

Card 4/4

LEVKOYEV, I.I., kand.khim.nauk; YOMPE, A.F., doktor khim.nauk;
SVESHNIKOV, N.N., kand.khim.nauk

Successes of the chemistry of sensitizing dyes. Khim.nauk i prom.
3 no.5:587-606 '58. (MIRA 11:11)
(Dyes and dyeing) (Photographic chemistry) (Silver halides)

AUTHORS: Vompe, A. F., Turitsyna, N. F. SOV/79-28-10-52/60

TITLE: Reactions of the Pyridinium Salts (Reaktsii piridiniyevykh soley) II. Reaction of the Chloro-2,4-Dinitro-Phenylates of the Substituted Pyridine Bases With Aniline (II. Vzaimodeystviye s anilinom khlor-2,4-dinitrofenilatov zameshchennykh piridinovykh osnovaniy)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2864 - 2873 (USSR)

ABSTRACT: Although the cleavage reaction of pyridine has long been known, the influence of the substituents in the pyridine ring on the process of this reaction could not yet be clarified. The authors therefore investigated the reaction of the chloro-2,4-dinitro-phenylate of pyridine and its derivatives with aromatic amines, especially with aniline. It was found that as a function of the character of the substituent, of its position in the pyridine ring, and of the temperature conditions, the reaction of the chlor-2,4-dinitro-phenylates of pyridine and its derivatives with aniline may take different courses. In the presence of electropositive

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Reactions of the Pyridinium Salts. II. Reaction of the SOV/79-28-10-52/60
Chloro-2,4-Dinitro-Phenylates of the Substituted Pyridine Bases With
Aniline

substituents in the pyridine nucleus the ring bonds N-C in the corresponding chloro-dinitro-phenylates are stable to the action of bases. In this process the ring bonds and the N-C bond outside the ring are split. The re-arrangement of the electropositive substituent in the chloro-dinitro-phenylate of the pyridine base from the β -position to the γ -position enhances the stabilizing effect of the substituent with regard to the C-N ring bond in the reaction with aniline. The investigated conversions of the chloro-2,4-dinitro-phenylates of the β - and γ -substituted pyridines are one of the many examples of the general splitting reaction of the quaternary pyridine-, quinoline- and isoquinoline salts with the action of water, alcohols, aromatic amines, phenols and other compounds. The N-C bond outside the ring splits particularly easily if the heterocyclic nitrogen atom is linked with an electronegative radical. There are 19 references, 8 of which are Soviet.

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Reactions of the Pyridinium Salts. II. Reaction of the Chloro-2,4-Dinitro-Phenylates of the Substituted Pyridine Bases With Aniline SOV/79-28-10-52/60

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut
i Institut organicheskoy khimii Akademii nauk SSSR (All-
Union Scientific Research Institute of Cinematography and
Photography and Institute of Organic Chemistry at the AS USSR)

SUBMITTED: March 22, 1957

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Завашчаніе па кніжлі, тэхналогіі і прымяненню
пірідна і кінноліна. Мінск, 1957.

Italiya, tekhnologiya i prikladnyye polivodnykh pyridina i khinolina materialy azovosobnutyia (Chemistry. Technology and utilization of pyridine and quinoline derivatives: Materials of the Conference) Msk., Izd-vo AN Latvyskoy SSR, 1960. 299 p. Kresna slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latvyskoy SSR, Institut khimii; Vsesoyuznoye khimicheskoye obshchestvo.

Ed.: S. Bakhmova; Tech. Ed.: A. El'yantsev; Editorial Board: Yu. A. Bakhovskiy, Candidate of Chemistry, E. V. Vinograd, Candidate of Chemistry (Resp. Ed.), L. P. Zolotarev, Doctor of Chemistry, and N. M. Kalugin.

PURPOSE: This book is intended for organic chemists and chemical engineers.

COVERED: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

III. SYNTHESIS BASED ON PYRIDINE

SHIMANUKHA, N. V., and S. A. QILIKER (Institute for Chemical Synthesis of the Academy of Sciences Latvyskaya SSR). Vapor Phase Contact Oxidation of Picolines

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Ukrainian Academy of Sciences, B. K. Putilyn and Ye. V. Institut, All-Union Motion Picture Scientific Research Institute)). Mobility of the Alkyl (Phenyl) Group in Conformation and in Salts of γ -Alkyl (Phenyl) Pyridines.

[illegible]

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Address: Dr. H. and S. A. Glick, [formerly medicinal chemistry institute] Institute of Organic and Analytical Chemistry, Laval University, 1030 Avenue de la Médecine, Québec, Québec, Canada G1V 0A6.

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Mr. and Mrs. V. V. Yanovskiy, Institute Khimii
Khimicheskikh Latvyskoy SSR (Chemical Institute of the
Academy of Sciences Latvian SSR),¹ Synthesis and Re-
actions of α -Nitroacrylonitriles
Card 8/10

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VOMPE, A. F.; LEVKOYEV, I. I.; TURITSYNA, N. F.; DURMASHKINA, V. V.;
IVANOVA, L. V.

Reactions of pyridinium salts. Part 3: Interaction of bromocyanides
of pyridinium bases with amines. Zhur. ob. Khim. 34 no.6:1758-
1771 Je '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut i
Institut organicheskoy khimii AN SSSR.

KHEYNMAN, A.S.; KARAU' SHCHIKOVA, R.V.; VOLKOVA, G.S.; PARFENOVA, N.M.;
SOLOV'YEV, S.M.; VOMPE, A.F.; ALEKSANDROV, I.V.; KUREPINA, G.F.;
IVANOVA, L.V.

Infrachromatic materials for scientific and technological purposes.
Zhur. prikl. spekt. 2 no.6:558-561 Je '65. (MIRA 18:7)

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S/081/62/000/004/060/087
B150/B138

AUTHORS:

Liorber, B. G., Shchelkina, Ye. P., Deychmeyster, M. V.,
Vompe, A. F.

10

TITLE:

Some merocyaninocarboyanine derivatives of imidazolinone-
(4)

15

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 4, 1962, 456, abstract
4L418 (Tr. Vses. n.-i. kinofoto-instituta, no. 37, 1960,
5-16)

20

TEXT: Symmetrical and asymmetrical merocyaninocarboyanine derivatives
are synthesized from 1-cyclohexyl-3-methylimidazolinone-4 with the
residues of various heterocyclic bases in merocyanic and carboyanic
components of the molecule. An investigation is made of the structural
dependence of the colors of these compounds and of the nature of the
electron density distribution in the chromophores of the molecule.

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[Abstracter's note: Complete translation.]

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